

CLAIMS:

1. An automatic loading mechanism for an occlusion device having an occluding body with a fixed center post, the mechanism comprising:
a plurality of puller arms attached to the occluding body for collapsing the device; and
a floating center post connected to the puller arms.
2. The mechanism of claim 1 wherein the puller arms are constructed of nickel titanium.
3. The mechanism of claim 1 wherein an angle between adjacent puller arms is between about 5° and about 180° .
4. The mechanism of claim 3 wherein the puller arms are offset from one another by about 45° .
5. The mechanism of claim 1 wherein the floating center post comprises an axially extending groove which reversibly connects with an axially extending pin extending from the fixed center post.
6. The mechanism of claim 1 wherein the floating center post is constructed of platinum-iridium.
7. The mechanism of claim 1 wherein the fixed center post is constructed of platinum-iridium.
8. A septal occlusion device comprising:
an occluding body comprising a first and second collapsible support frame;

a plurality of puller arms attached to the occluding body; and
a floating center post which, when pulled, pulls the puller arms to
collapse the first collapsible support frame.

9. The device of claim 8 wherein the arms are constructed of nickel titanium.

10. The mechanism of claim 8 wherein an angle between adjacent puller arms is between about 5° and about 180°.

11. The mechanism of claim 10 wherein the puller arms are offset from one another by about 45°.

12. The device of claim 8 wherein the floating center post comprises an axially extending groove which reversibly connects with an axially extending pin extending from the fixed center post.

13. The device of claim 8 wherein the floating center post is constructed of platinum-iridium.

14. The device of claim 8 wherein the fixed center post is constructed of platinum-iridium.

15. The device of claim 8 wherein the support frames each comprise a wire hoop and a plurality of support arms.

16. The device of claim 15 wherein the support arms are constructed of stranded wire.

17. An occlusion device comprising:
a fixed center section extending in an axial direction;
right and left elastic shape memory fixation devices attached to the
fixed center section;
right and left sheets attached to the right and left fixation devices,
respectively;
right and left support hoops attached to the right and left fixation
devices, respectively;
a plurality of puller arms; and
a floating center post which, when pulled, pulls the puller arms to
collapse the first collapsible support frame.
18. The occlusion device of claim 17 wherein the arms are constructed
of nickel titanium.
19. The mechanism of claim 17 wherein an angle between adjacent
puller arms is between about 5° and about 180° .
20. The mechanism of claim 19 wherein the puller arms are offset from
one another by about 45° .
21. The occlusion device of claim 17 wherein the floating center post
comprises an axially extending groove which reversibly connects with an axially
extending pin extending from the fixed center post.
22. The occlusion device of claim 17 wherein the floating center post
is constructed of platinum-iridium.

23. The occlusion device of claim 17 wherein the fixed center post is constructed of platinum-iridium.

24. An occlusion device for occluding a septal defect, the occlusion device comprising:

- a fixed center post;
- a first occluding body connected to the center post, wherein the first occluding body comprises a hoop at its outer edge;
- a second occluding body connected to the center post, wherein the second occluding body comprises a hoop at its outer edge;
- a plurality of puller arms connected to the first occluding body; and
- a floating center post which, when pulled, pulls the puller arms to collapse the first occluding body.

25. The occlusion device of claim 24 wherein the arms are constructed of nickel titanium.

26. The mechanism of claim 24 wherein an angle between adjacent puller arms is between about 5° and about 180°.

27. The mechanism of claim 26 wherein the puller arms are offset from one another by about 45°.

28. The occlusion device of claim 24 wherein the floating center post comprises an axially extending groove which reversibly connects with an axially extending pin extending from the fixed center post.

29. The occlusion device of claim 24 wherein the floating center post is constructed of platinum-iridium.

30. The occlusion device of claim 24 wherein the fixed center post is constructed of platinum-iridium.

31. An occlusion device for the closure of a physical anomaly, the device comprising:

- a fixed center post having distal and proximal ends;
- a first set of support arms extending from the distal end of the center post;
- a first sheet attached to the first set of arms;
- a first hoop attached to the first set of arms and the first sheet;
- a second set of support arms extending from the proximal end of the center post;
- a second sheet attached to the second set of support arms;
- a second hoop attached to the second set of arms and the second sheet;
- a floating center post located on the proximal end of the device; and
- a plurality of puller arms attached to the floating center post and first support hoop which collapse the first support hoop when the floating center post is pulled.

32. The occlusion device of claim 31 wherein the arms are constructed of nickel titanium.

33. The mechanism of claim 31 wherein an angle between adjacent puller arms is between about 5° and about 180°.

34. The mechanism of claim 33 wherein the puller arms are offset from one another by about 45° .
35. The occlusion device of claim 31 wherein the floating center comprises an axially extending groove which reversibly connects with an axially extending pin extending from the fixed center post.
36. The occlusion device of claim 31 wherein the floating center post is constructed of platinum-iridium.
37. The occlusion device of claim 31 wherein the fixed center post is constructed of platinum-iridium.
38. An occlusion device comprising:
a first collapsible support frame which comprises a support hoop;
a second collapsible support frame which comprises a support hoop;
a first sheet attached to the first collapsible support frame;
a second sheet attached to the second collapsible support frame;
a plurality of puller arms attached to the first support hoop; and
a floating center post which, when pulled, engages the puller arms to collapse the first collapsible support frame.
39. The occlusion device of claim 38 wherein the arms are constructed of nickel titanium.
40. The mechanism of claim 38 wherein an angle between adjacent puller arms is between about 5° and about 180° .

41. The mechanism of claim 40 wherein the puller arms are offset from one another by about 45°.
42. The occlusion device of claim 38 wherein the floating center comprises an axially extending groove which reversibly connects with an axially extending pin extending from the fixed center post.
43. The occlusion device of claim 38 wherein the floating center is constructed of platinum-iridium.
44. The occlusion device of claim 38 wherein the fixed center post is constructed of platinum-iridium.